

ABSTRACT

This invention developed a communication method which satisfies confidentiality to secure the contents from tapping transmission and user authentication to confirm the identification of parties involved in the communication. The communication method is implemented with the following steps: both a sender and a receiver involved in the communication deposit fingerprint information encoded from minutia of their fingerprints to a key control system; the sender sends data encrypted with his/her fingerprint information which is encoded from the minutia of the sender as the key to the key control system; the key control system decodes the encrypted data with the fingerprint information which is encoded from the minutia of the sender as the key; the key control system re-encrypts the decoded data with the fingerprint information which is encoded from the minutia of the receiver as the key, and sends the re-encrypted data to the receiver; and the receiver decodes the re-encrypted data with the fingerprint information which is encoded from the minutia of his/her fingerprint as the key.